

CLAIMS:

1. A graphical interface method for producing configuration information for control apparatus for a power system including a plurality of power supplies, comprising the
5 steps of, using a processor:

receiving information relating to characteristics and connections of the plurality of power supplies, said information determining a topology of the power system;

displaying on a display device a graphical display
10 representing the topology of the power system;

receiving user input information to determine sequencing of the plurality of power supplies;

displaying on the display device a graphical display representing the sequencing of the plurality of power supplies;
15 and

producing said configuration information for the control apparatus consistent with the displayed topology and sequencing of the plurality of power supplies.

2. A method as claimed in claim 1 wherein the step of
20 receiving said information determining a topology of the power system comprises receiving user input information for identifying information for at least one of the plurality of power supplies in a database.

3. A method as claimed in claim 2 wherein the step of
25 producing said configuration information comprises deriving information for said at least one of the plurality of power supplies from the database.

4. A method as claimed in claim 1 wherein the step of displaying a graphical display representing the topology of the
30 power system comprises displaying icons representing the

plurality of power supplies and paths extending to and from the icons representing input and output voltage lines of the power supplies.

5. A method as claimed in claim 4 wherein the step of displaying a graphical display representing the sequencing of the plurality of power supplies comprises displaying at least some of said icons representing the plurality of power supplies in relatively different positions along respective ones of said paths.
- 10 6. A method as claimed in claim 5 wherein the step of displaying a graphical display representing the sequencing of the plurality of power supplies further comprises displaying at least one additional symbol representing said sequencing.
- 15 7. A method as claimed in claim 6 wherein said at least one additional symbol comprises an arrow representing said sequencing.
- 20 8. A method as claimed in claim 1 wherein the step of displaying a graphical display representing the sequencing of the power system comprises displaying icons representing the plurality of power supplies and displaying at least one additional symbol representing said sequencing.
- 25 9. A method as claimed in claim 8 wherein said at least one additional symbol comprises at least one arrow representing said sequencing.
10. A method as claimed in claim 8 wherein said at least one additional symbol comprises at least one sequence number representing said sequencing.

11. A method as claimed in claim 8 wherein the step of displaying a graphical display representing the sequencing of the power system further comprises displaying paths extending to and from the icons representing input and output voltage
5 lines of the power supplies.

12. A method as claimed in claim 1 wherein the step of receiving user input information to determine sequencing of the plurality of power supplies comprises the steps of displaying options for possible sequencing of each of the plurality of
10 power supplies after another of the plurality of power supplies, and determining sequencing in response to user input selection of said options.

13. A method as claimed in claim 12 wherein the step of displaying options for possible sequencing of each of the plurality of power supplies after another of the plurality of power supplies comprises displaying a matrix having different representations for selected, selectable, and non-selectable sequencing options.

14. A method as claimed in claim 1 wherein the graphical display representing the sequencing of the plurality of power supplies represents startup sequencing of the power supplies, and the step of producing said configuration information for the control apparatus comprises producing said configuration information for startup sequencing of the power supplies
25 consistent with the displayed sequencing and for normal shutdown of the power supplies with sequencing reversed from the startup sequencing.

15. A method as claimed in claim 1 wherein the steps of displaying comprise representing different types of power
30 supply by different icons.

16. A computer readable storage medium having software stored thereon for instructing a processor to implement the method of claim 1.

17. A method of configuring control apparatus for a power system including a plurality of power supplies, comprising the steps of producing configuration information for the control apparatus using the method of claim 1, and transferring the configuration information to the control apparatus.

18. A graphical interface method for producing configuration information for control apparatus for a power system including a plurality of power supplies, comprising the steps of, using a processor:

in response to user input, displaying on a display device a graphical display representing the topology and sequencing of the plurality of power supplies of the power system; and

producing said configuration information for the control apparatus consistent with the displayed topology and sequencing of the plurality of power supplies.

20 19. A graphical interface method for producing configuration information for control apparatus for a power system including a plurality of power supplies, comprising the steps of, using a processor:

in response to user input, selecting power supplies using a database;

in response to user input, determining sequencing of the power supplies;

displaying on a display device a graphical display representing the power supplies and their sequencing; and

30 producing said configuration information for the

control apparatus consistent with the displayed sequencing of the power supplies and using information from the database for the selected power supplies.

20. A method as claimed in claim 19 wherein the step of displaying a graphical display representing the power supplies and their sequencing comprises displaying icons representing the plurality of power supplies and displaying paths extending to and from the icons representing input and output voltage lines of the power supplies.
- 10 21. A method as claimed in claim 20 wherein the step of displaying icons comprises representing different types of power supply by different icons.
22. A method as claimed in claim 20 wherein the step of displaying further comprises displaying at least some of said 15 icons representing the power supplies in relatively different positions along respective ones of said paths to represent the sequencing of the power supplies.
23. A method as claimed in claim 22 wherein the step of displaying further comprises displaying at least one additional 20 symbol representing the sequencing of the power supplies.
24. A method as claimed in claim 20 wherein the step of displaying further comprises displaying one or more arrows representing the sequencing of the power supplies.
25. A computer readable storage medium having software stored thereon for instructing a processor to implement the method of claim 19.